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(54) FLUID DELIVERY SYSTEMS AND METHODS

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ABSTRACT

A method of dispensing fluid includes three processes. A first one of these processes includes pumping fluid into a resilient variable-volume dispensing chamber. The dispensing chamber is in series with a normally present finite fluid impedance and an output. The impedance is sufficient so as to cause expansion of the dispensing chamber as it receives pumped fluid even while some fluid flows through the output. Another one of these processes includes repeatedly measuring a parameter related to volume of the dispensing chamber over time. A third one of these processes includes controlling the pumping of fluid based on repeated measurements of the parameter to produce a desired fluid flow through the output. A corresponding system for dispensing fluid implements these processes.

